IMPACT OF ASSIGNMENT OF BENEFITS LEGISLATION – BASELINE ANALYSIS

Introduction

The Maryland Health Care Commission (MHCC) is required to report to the House Health and Government Operations Committee and the Senate Finance Committee on our plans to study the impact of the Assignment of Benefits and Reimbursement of Nonpreferred Providers (Chapter 537, 2010 Laws of Maryland), which became effective July 1, 2011.

The law applies to health insurance policies issued or renewed by Life and Health Insurers and Nonprofit Health Service Plans (insurance carriers) on or after July 1, 2011. The law requires an insurance carrier to recognize an Assignment of Benefits (AOB) and to send the insurance payment directly to the provider who accepts an AOB. Providers are not required to accept AOB, but if they do, the law establishes payment floors for three groups of providers: (1) hospital-based providers, (2) on-call providers and (3) all other providers.

The law also establishes the following:

- Hospital-based physicians who elect to receive an AOB may not "balance bill" the patient, but they will be paid by the insurance carrier the greater of:
    - 140% of the average contract rate paid in the preceding calendar year in the same Medicare geographic area for the same covered services, or
    - The final allowed amount that the insurance carrier paid in 2009 to the hospital-based physician billing under the same 2009 federal tax identification number. This amount shall be inflated by the change in the Medicare Economic Index from 2010 to the current year.
- On-call providers who elect to receive an AOB may not "balance bill" the patient, but they will be paid by the insurance carrier the greater of:
    - 140% of the average contract rate the insurance carrier paid in the previous calendar year in the same Medicare geographic area for the same covered service; or
    - The average rate the insurance carrier paid in 2009 for the same covered services to a physician who was not under written contract with the insurance carrier. This amount shall be inflated by the change in the Medicare Economic Index from 2010 to the current year.
- All other physicians (typically office-based providers) may elect to receive an AOB and will not be limited in the amount of their bill, but must provide a disclosure form (developed by the Maryland Insurance Administration) to the patient giving an estimate of the costs of the services to be provided.

This report presents information for the period prior to implementation in order to have a baseline by which to assess the impact of the legislation. Data are presented from the perspective of the different stakeholders affected by the legislation—patients, payers, and providers.

Study Design

This study analyzed privately insured medical claims from the 2010 Medical Care Data Base, which serves as the baseline information for examining the impact of the legislation. Claims for self-insured employers and the federal government were excluded from the study, as were claims for those with HMO coverage, which is not covered by the law. The analysis examines the relative volumes of out-of-network claims and their associated payments, including the payment shares contributed by payers and patients, for the three groups of stakeholders affected by the law: providers, patients, and payers.

Provider Perspective: Baseline Measures of Out-of-Network Payments for Physicians

The provider analysis focuses on the physician specialties and the locations of care primarily affected by the law. Specialties were categorized based on provider specialty codes[1]. Hospital-based specialties include emergency room, anesthesia, neonatology, radiology, and pathology; hospital on-call surgical specialties include general surgery, orthopedics, neurosurgery, urology, ENT, oral surgery, plastic surgery, ophthalmology, thoracic surgery, and vascular surgery; and hospital on-call medical specialties include cardiology, pulmonology, hematology, oncology, infectious diseases, nephrology, psychiatry, and neurology. We also examined services delivered by primary care physicians in a non-hospital setting, which will provide control values for the trend analysis. Primary care specialties include internal medicine-general, family practice-general and adolescent, pediatrics-general and adolescent, and general medicine.

We used the Maryland Board of Physicians (BOP) licensure survey data to measure the baseline frequency of participation by practicing physicians with at least one private payer network. The survey is part of the BOP application for license renewal. Participation rates were calculated among physicians with a Maryland license who reported providing patient care for a minimum of 8 hours per week.

Table 1 shows the percent of physicians that participate in at least one private payer network, by physician specialty. While most specialties reflect high participation rates of over 80% or more, psychiatrists have the lowest participation rate in private payer networks, with only 51% participation.

[1] As defined by the Maryland Health Care Commission Data Base Submission Manual

Table 1: Percent of Physicians Participating in Private Insurer Networks by Specialty

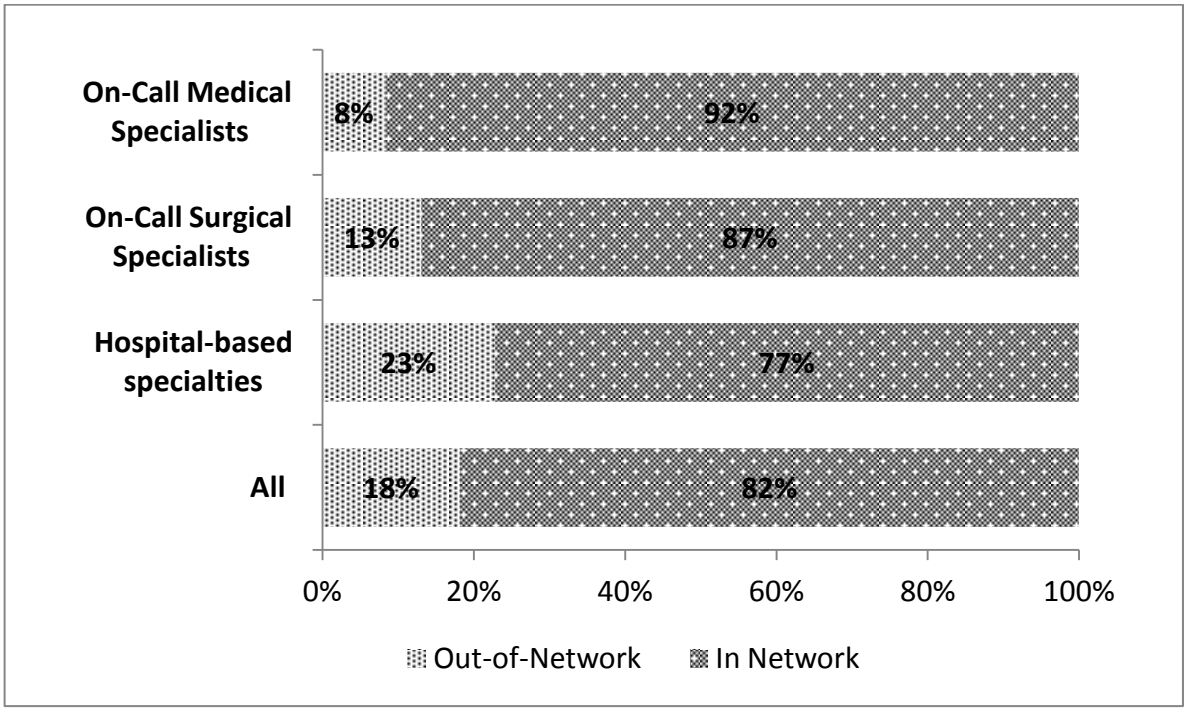
Hospital Based	
Anesthesiology	91%
Pathology	90%
Radiology	81%
Emergency Medicine	94%
Neonatal-Perinatal Medicine	83%
On-Call Surgical	
Surgery	87%
Other specialties classified as surgical	91%
On-Call Medical	
Neurology (including Neurosurgery)	94%
Psychiatry	51%
Other Medical Specialties	88%
Primary Care Specialties	87%

Out-of-network versus in-network payment for hospital-based services

Figure 1.1a shows the aggregate payment shares for out-of-network (OON) versus in-network (IN) services for the different specialty groups, as well as all specialties combined (hospital-based, on-call surgical, on-call medical). Total payments include both patient and payer shares of payment and are limited to those for hospital-based inpatient, outpatient, and emergency room services.

Across all specialties combined, aggregate OON spending was almost one-fifth of overall total spending. For hospital-based specialties, aggregate OON spending accounted for almost a quarter of total spending. Among the on-call specialties, aggregate OON spending accounted for a smaller percentage of total spending, with 13% for on-call surgical specialties and 8% for on-call medical specialties.

Figure 1.1a: Aggregate Payment Shares by Provider Specialty*, 2010

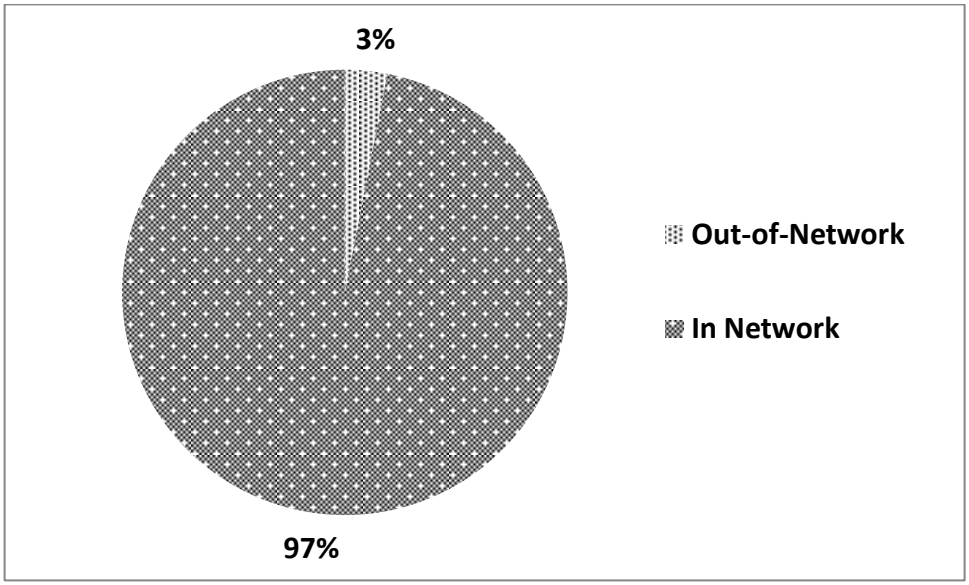


*__NOTE__: Total payments for hospital-based inpatient, outpatient, and emergency room services include payer and patient payments; 'All' is hospital-based and on-call specialties combined.

Out-of-network versus in-network payment for primary care services

Figure 1.1.b shows the shares of spending on services provided by primary care physicians in a non-hospital setting. The aggregate OON share of spending on Primary Care was much smaller, at 3%, compared to hospital-based and on-call specialties, which ranged from 8% to 23% (Figure 1.1a).

Figure 1.1.b: Aggregate Payment Shares for Primary Care Services,* 2010



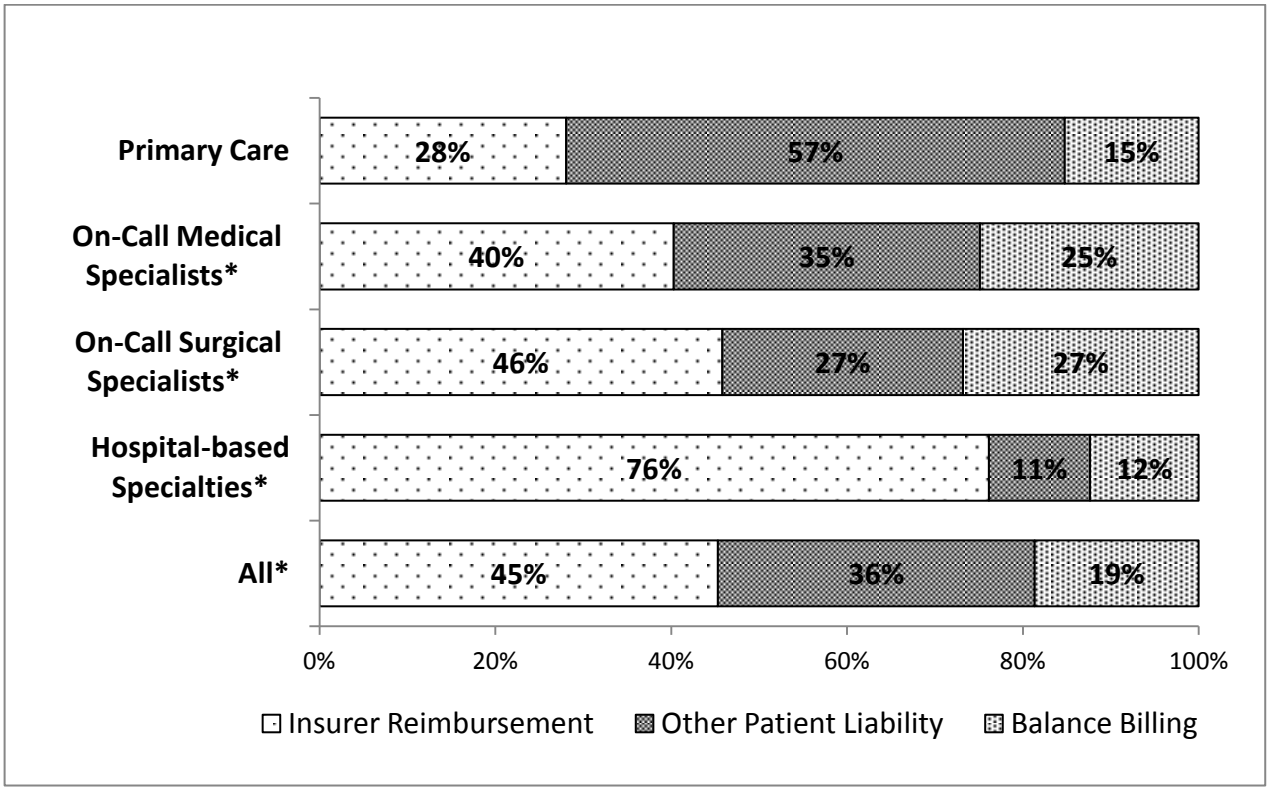
***NOTE:** Total payments for services delivered by primary care specialties in a non-hospital setting include payer and patient payments.

Components of Out-of-Network Payments

Figure 1.2 shows the decomposition of out-of-network payment shares by provider specialties. Insurer reimbursement was calculated as the ratio of carrier reimbursement to the total billed amount (for out-of-network services only); while total patient liability was further decomposed into 'other' patient liability (for out-of-network services only) and balance billing. 'Other' patient liability is comprised of total patient co-pays, the patient deductible, and total other patient obligations.

Out-of-network hospital services delivered by hospital-based specialties—which account for 23% of the total payments received by these specialties for hospital services (Figure 1.1a)—are largely funded by insurers. Insurer reimbursement accounts for 76% of the payments for these OON services, with patient balance billing and other patient liability accounting for 12% and 11%, respectively. On-call medical and surgical specialties receive comparatively smaller proportions of their payments for OON hospital services—which account for just 8% and 13%, respectively, of their total payments for hospital services (Figure 1.1a)—from insurers and larger shares from patients. Insurer reimbursements account for 40% and 45%, respectively, of their OON hospital services payments, balance billing accounts for 25% and 27%, respectively, and other patient liability accounts for 35% and 27%, respectively. Out-of-network services delivered in a non-hospital setting by primary care providers—which are relatively rare (Figure 1.1b)—are primarily funded by patient copayments and deductibles (other patient liability), with insurer reimbursements and balance billing comprising 28% and 15%, respectively.

Figure 1.2: Decomposition of Out-of-Network Payments by Provider Specialty,* 2010



NOTE: *Limited to inpatient, outpatient, and emergency room settings for hospital and on-call specialties; 'All' is hospital-based and on-call specialties combined. Primary care is limited to services delivered in an office-based setting.

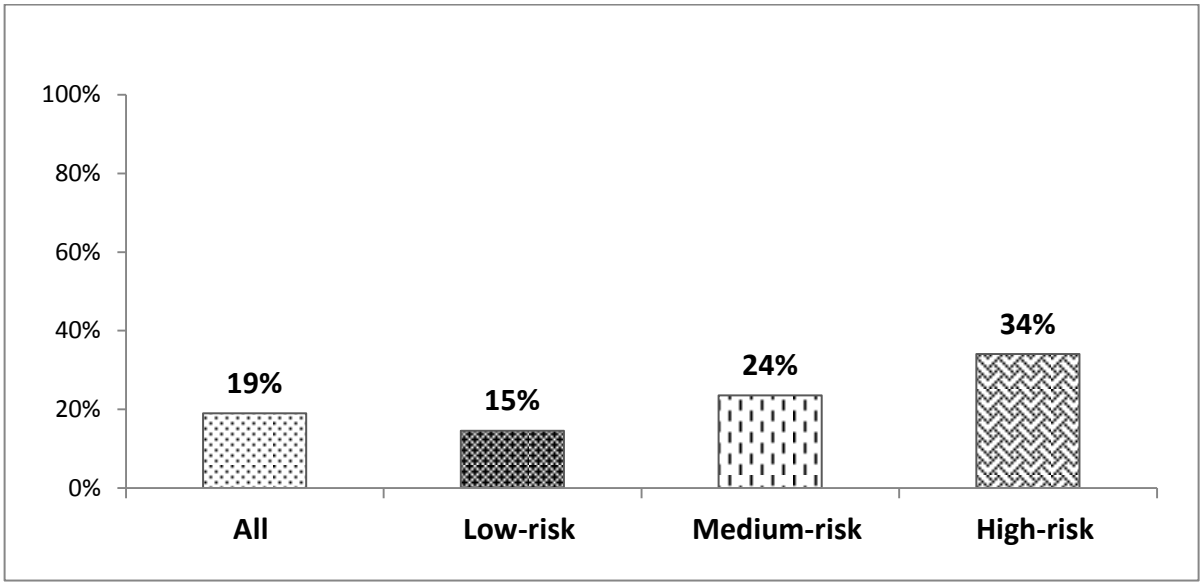
Patient Perspective: Baseline Measures of Out-of-Network Services for Users

The patient analysis examines the impact of the AOB legislation on patients, particularly the impact on their share of out-of-network (OON) payments for professional services. The analysis is conducted by Maryland region of patient residence and by patient risk category, where users are classified as low-, medium- or high-risk based on their risk for healthcare spending. We also classify users by the proportion of total payments for professional services allocated to OON services. The analysis was conducted on fully-insured patients enrolled for all 12 months of 2010.

Use of Out-of-Network Professional Services by Patient Subgroups

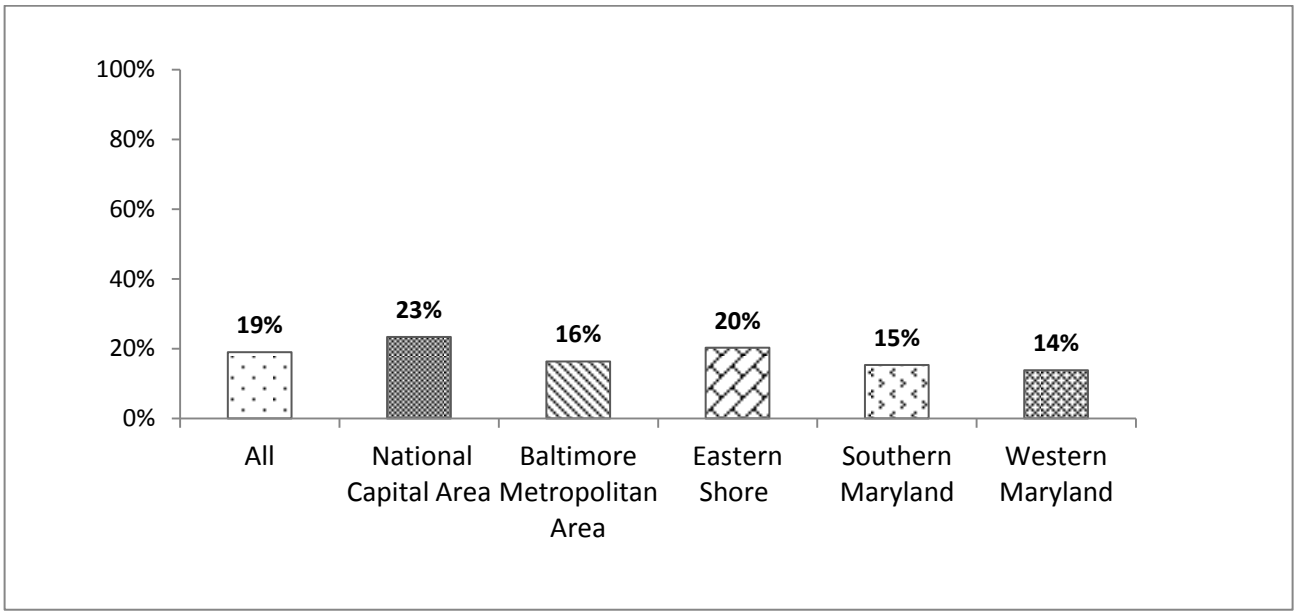
In Figure 2.1, we present the proportion of users who had any payments for OON professional services, overall and by user expenditure risk level. About 1 out of every 5 users obtained some OON professional services in 2010. Not surprisingly, high-risk users were more likely to have used OON services (34%), compared to low- (15%) and medium-risk users (24%).

Figure 2.1: Proportion of Professional Service Users with Out-of-Network Services, Overall and by Expenditure Risk Category, 2010



In Figure 2.2, we present the proportion of users with OON professional service payments overall and by the patients' region of residence in Maryland. Similar to the analysis results by risk level, there was variation in the percentage of users with some use of OON professional services across Maryland regions—23% of users in the National Capital Area obtained one or more OON services compared to 14% of users in the Western Maryland region. The National Capital Area and the Eastern Shore had the highest proportions of users with OON professional services.

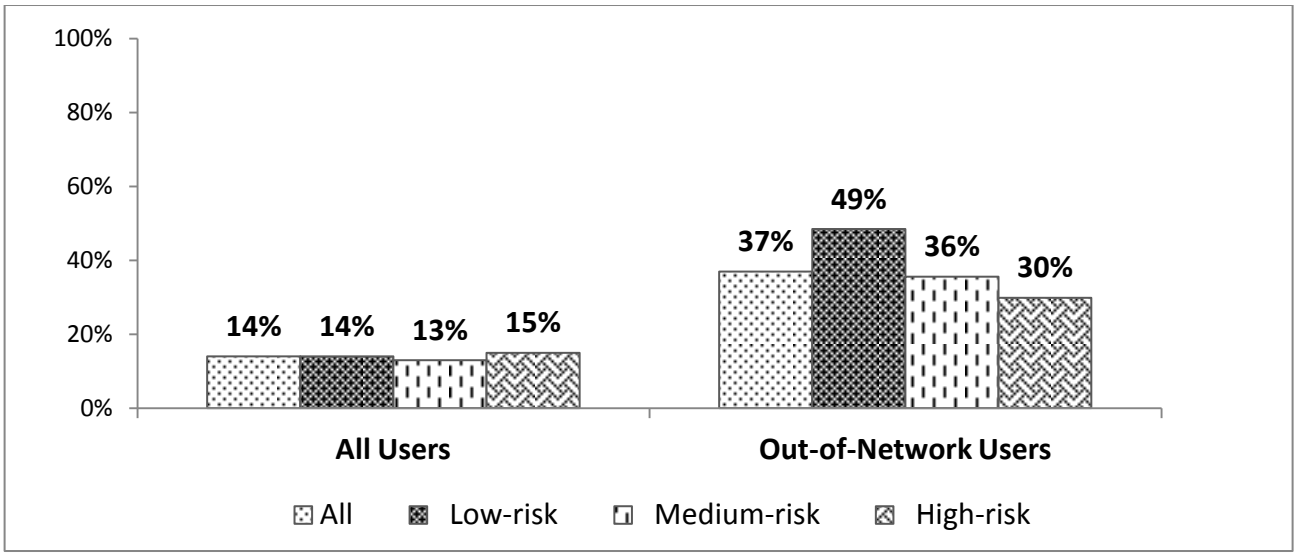
Figure 2.2: Proportion of Professional Service Users with Out-of-Network Services Overall and by Region of Residence, 2010



Out-of-Network Spending for Patient Subgroups

Figure 2.3 shows the out-of-network share (OON) of professional services payments for all users of professional services contrasted with the OON payment shares among just the users who had one or more out-of-network services, by risk level. Average OON share of payments is calculated as the ratio of payments for OON services to total person-level payments for all professional services. Payments include insurer reimbursements as well as patient out-of-pocket spending.

Figure 2.3: User-Level Out-of-Network Share of Total Payments for Professional Services* Overall and by Expenditure Risk Category, 2010



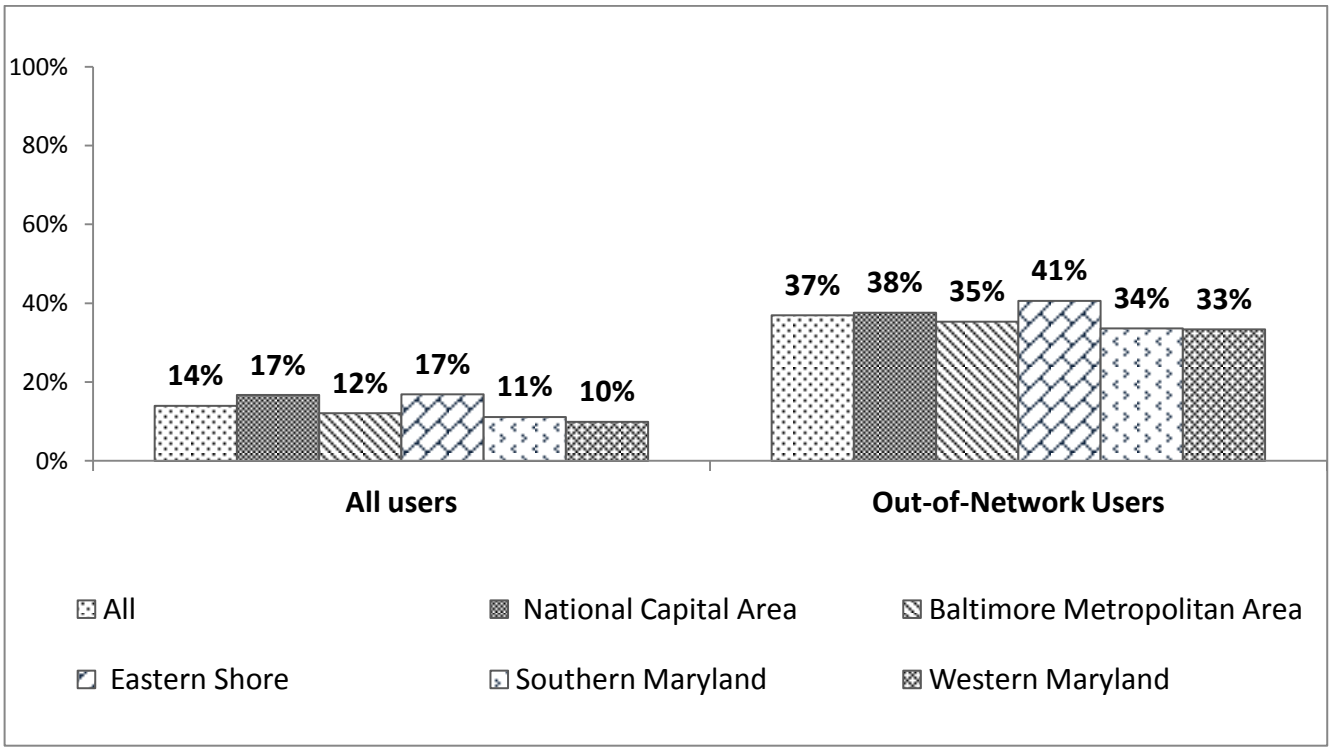
***NOTE**: Total payments for all services include payments made by payers as well as patients.

Among all users of professional services, high-risk users had the highest (15%) OON share of payments compared to low- (14%) or medium-risk (13%) users, though the proportions are very similar across the risk types. Average per capita spending for all professional services, by risk category, was as follows: $1,012 overall; $539 for low-risk users; $1,436 for medium-risk users; and $2,903 for high-risk users.

However, when we restrict the analysis to just persons with some OON service use, the aggregate OON shares of professional payments are considerably higher. Among low-risk users, nearly half (49%) of professional service payments are for OON services, compared to relatively lower OON payment shares among the medium- and high-risk users (36% and 30%, respectively). Average per capita spending for all professional services was also considerably higher among those with OON service use compared to all users. Average per capita spending by risk category for those with OON service use was as follows: $5,369 overall; $3,703 for low-risk users; $6,095 for medium-risk users; and $8,519 for high-risk users.

Figure 2.4 shows the OON share of professional service payments for all users contrasted with just the users who had one or more out-of-network services, by region of residence. Average OON share of payments is calculated as the ratio of payments for OON services to total person-level payments for all professional services. Payments include insurer reimbursements as well as patient out-of-pocket spending.

Figure 2.4: User-Level Out-of-Network Share of Professional Service Payments* Overall and by Region of Residence, 2010



***NOTE:** Total payments for all services include payments made by payers as well as patients.

There is considerable regional variation in the use of OON professional services, as evidenced in the range of values for the OON share of payments among all users (10%–17%), in which the highest

share is 1.7 times the lowest share. When the analysis is restricted to just persons with some OON service use, the variation persists (33%–41%) but the relative magnitude of the variation is smaller, with the highest share being 1.2 times the lowest share.

Among all users of professional services, as well as among just those with some OON service use, residents of the Eastern Shore have the highest OON share of professional payments, and residents of Western Maryland have the lowest OON share of payments.

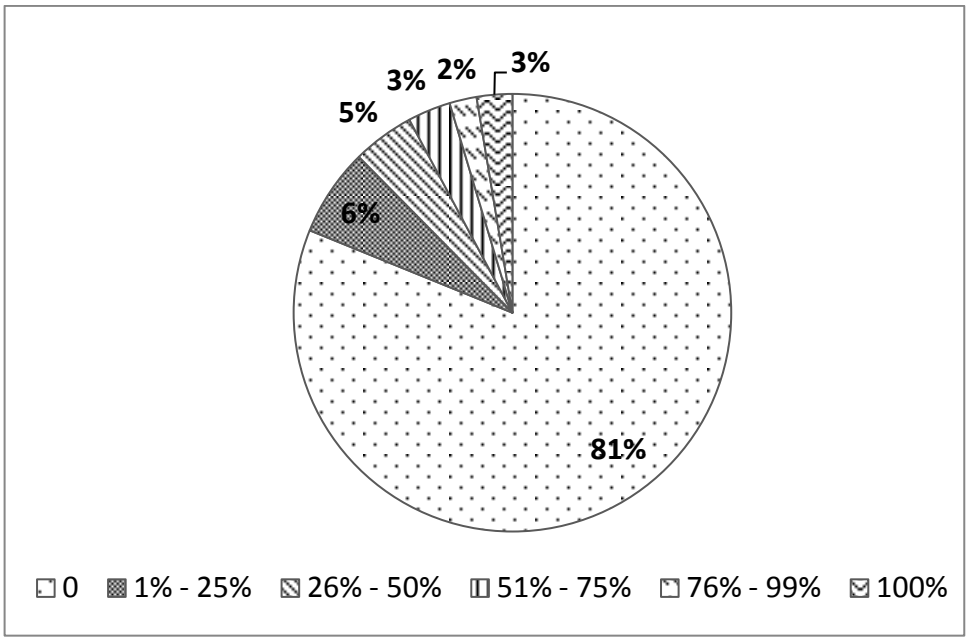
Variation in the Extent of Out-of-Network Spending

Figure 2.5 shows the distribution of professional service users grouped according to the patients' OON share of total payments for professional services. There are six categories of OON share of payments, ranging from no OON payments to 100% of total professional payments allocated to OON services.

The vast majority (81%) of professional service users enrolled in fully-insured private plans throughout 2010 had no out-of-network payments. Users with some OON payments accounted for 19% of all users, ranging from 2% in the group of users that had 76% to 99% of their professional service payments allocated to OON services, to 6% in the group with 1% to 25% of payments allocated to OON services.

Among only the users with some OON service use, the majority (51%) had no more than half of their associated spending on professional services allocated to OON services, with 31% in the 1%–25% OON payment share category and 26% in the 26%–50% payment share category. The remaining 43% had higher OON payment shares: 16% in each of the 51%–75% and 100% categories and 11% in the 76%–99% category.

Figure 2.5: Distribution of Users by Level of Out-of-Network Share of Professional Service Payments* (N=227,597)



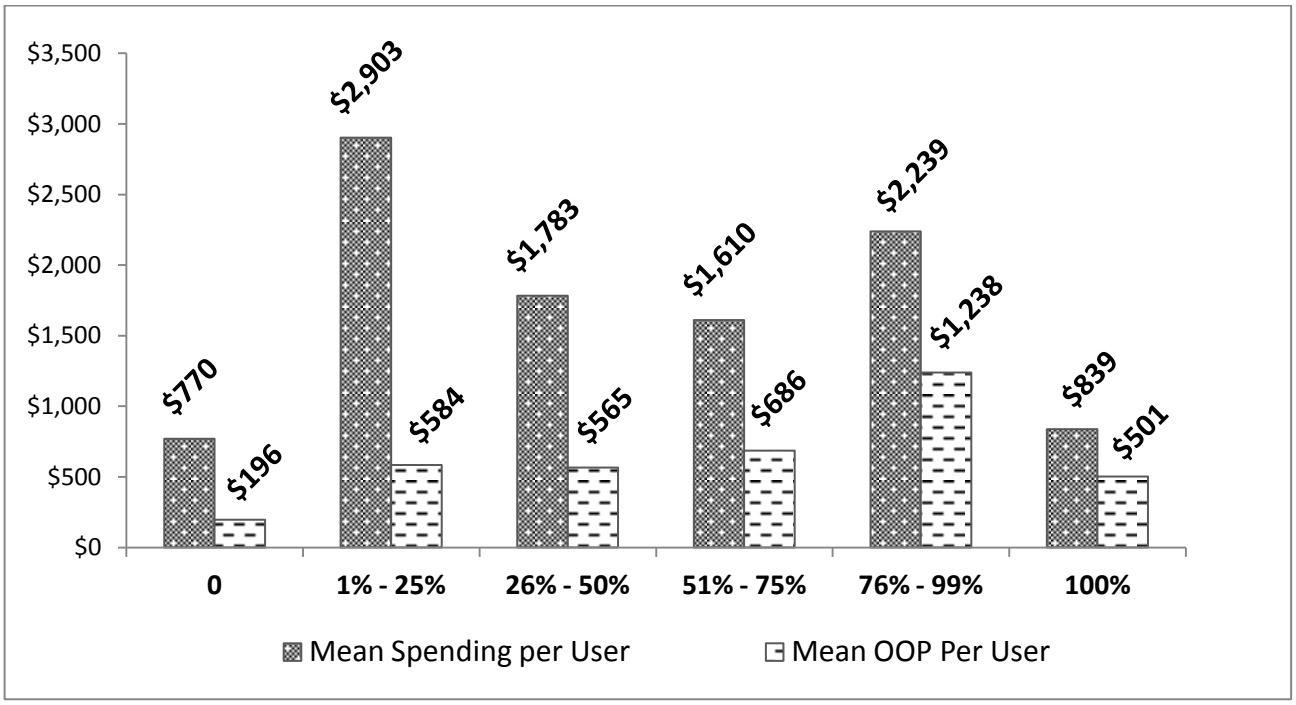
***NOTE:** Total payments for all services include payments made by payers as well as patients.

Average Per User Total and Out-of-Pocket Spending by Level of Out-of-Network Share of Professional Service Payments

Figure 2.6 shows the mean total professional service spending per user contrasted with the mean out-of-pocket (OOP) spending per user, grouped according to the patients' OON share of total payments for professional services.

Among the 81% of users with no OON service use, the mean per user total spending on professional services was $770, of which $196 was patient out-of-pocket (OOP) spending. Mean total spending per user and mean OOP spending are substantially higher among users with OON service use, ranging from roughly $1,600 to $2,900 for total spending and roughly $500 to $2,240 for OOP spending. However, as the level of OON share of spending rises, mean spending on professional services and mean OOP spending do not increase directly. This is likely due to differences in the volume and complexity of services used by the patients in the different categories of OON share of total spending. The mean total spending for persons who used only OON services is very similar to the mean for those with no OON services, indicating that the 100% category is comprised of users who obtained relatively few professional services; however, the mean OOP spending for these users is considerably higher than the mean OOP spending among users with no OON service use due to balance billing and possible deductibles associated with OON service use.

Figure 2.6: Mean Per User Total Professional Service Spending Versus Out-of-Pocket Spending by Level of Out-of-Network Share of Professional Service Payments*, 2010 (N=227,597)

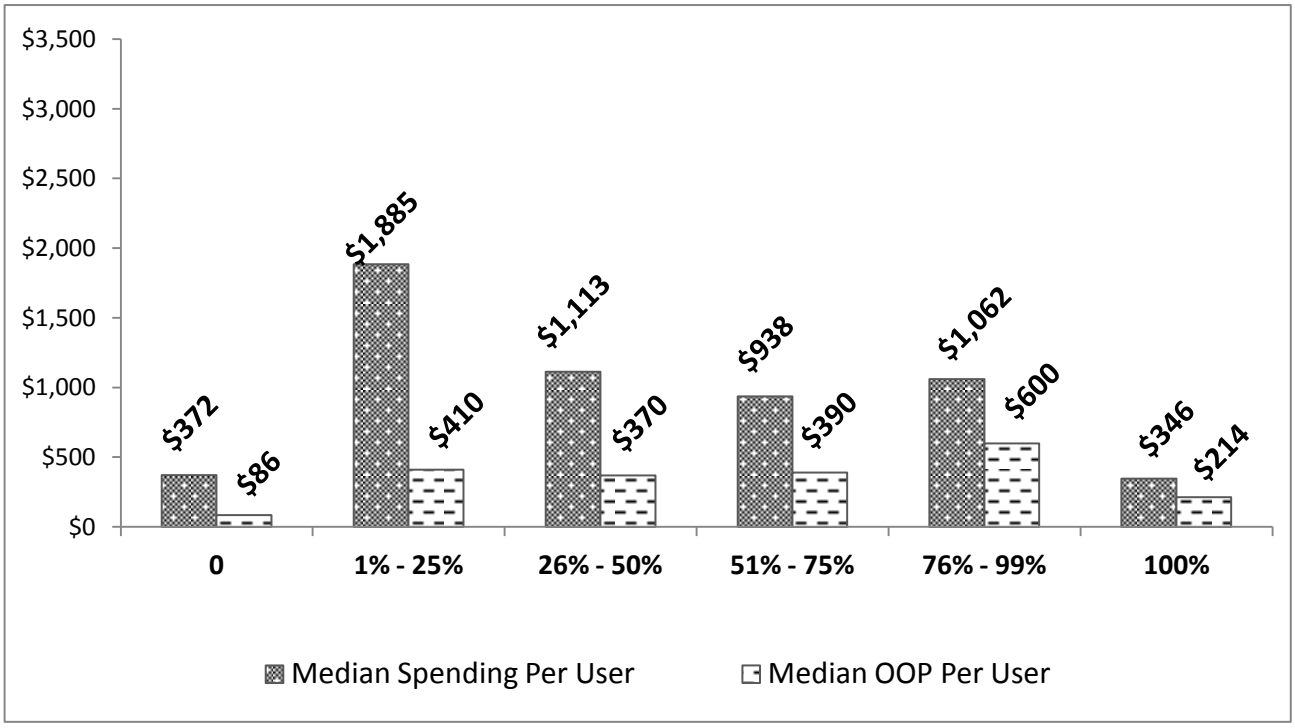


***NOTE:** Total payments for all services include payments made by payers as well as patients.

Figure 2.7 is similar to Figure 2.6, but shows the median total spending per user contrasted with the median OOP spending per user in place of the mean values. As expected, the median spending

values are substantially lower than the corresponding mean values[2] in Figure 2.6, although the pattern across the OON share of payment categories in the levels of per user total and OOP spending are similar. The exception is that median total spending on professional services is lowest among those who used only OON services, with a slightly higher median among those with no OON service use.

Figure 2.7: Median Per User Total Professional Services Spending Versus Out-of-Pocket Spending by Level of Out-of-Network Share of Professional Service Payments*, 2010 (N=227,597)



***NOTE:** Total payments for all services include payments made by payers as well as patients.

Decomposition of Total Spending by Level of Out-of-Network Share of Professional Service Payments

Figure 2.8 shows the proportions of total payments for all professional services attributable to insurers and patients. The patient out-of-pocket share was further decomposed into balance billing and other patient liability (copayments and deductibles).

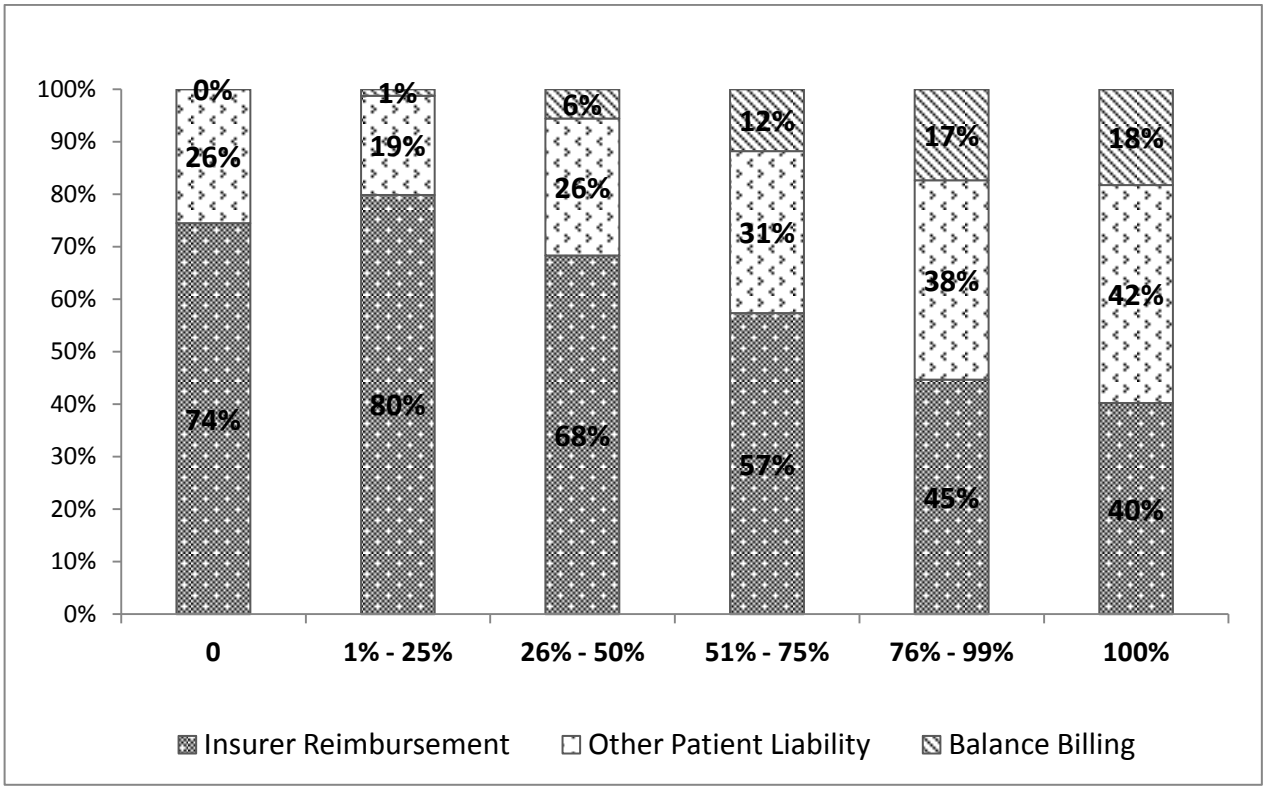
As expected, when there is no spending on OON services, the balance billing proportion of total payments is zero. For users in this category, insurer payments account for 74% of total spending and patient copayments and deductibles ('other patient liability') account for 26% of total spending.

Among the categories of users with OON service use, as the OON share of total spending rises, the insurer reimbursement proportion falls (from 80% to 40%) and the patient out-of-pocket proportions increase. The balance billing and other patient liability (copayments and deductibles) proportions rise from 1% and 19%, respectively, among users with OON share of spending from 1% – 25% to 18% and 42%, respectively, among users with only OON services (100%). Total patient out-of-pocket

[2] The data distribution of per user spending has some values that are outliers (much larger than most). Outliers drive up the value of the mean but do not affect the median, which is in the middle of the distribution.

spending—balance billing and other patient liability combined—increases from 20% among users with 1%–25% of their professional service expenditures allocated to OON services to 60% among users with OON services only.

Figure 2.8: Total Payments for Professional Services Decomposed Into Insurer and User Shares by User Level of Out-of-Network Share of Total Payments, 2010



Payer Perspective: Baseline Measures of Out-Of-Network Services and Payments

The payer analysis examines the impact of the AOB legislation on private payers and how their payment liability would change as a result of the legislation. We examined the impact on service networks as well as financial measures by service category and site of care.

Service categories were defined using Berenson-Eggers Type of Service (BETOS) codes.[3] Site of care was categorized as hospital and non-hospital based services. Hospital-based services included emergency room, anesthesia, critical care, pathology, radiology, surgical specialists, and medical specialists. Non-hospital based services were comprised of anesthesia, pathology, radiology, surgical specialists, medical specialists, and primary care.

The four major payers—CareFirst, Aetna, United and CIGNA—were compared for purposes of this analysis. However, with the exception of emergency room services, the differences across the payers

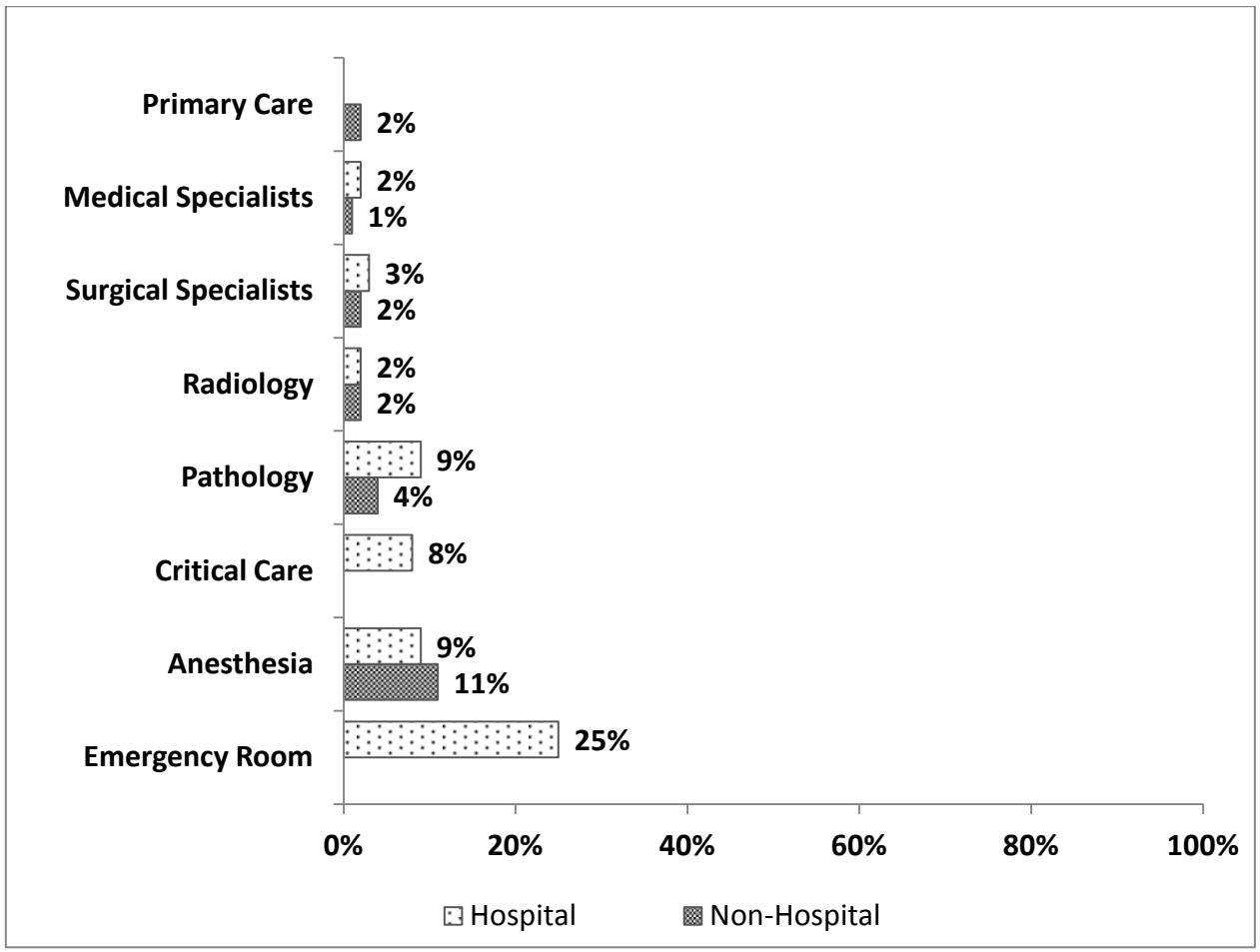
[3] Berenson-Eggers Type of Service (BETOS) codes are assigned for each Health Care Financing Administration Common Procedure Coding System (HCPCS) procedure code. They are used to classify Medicare claims according to type of service (such as evaluation & management, procedure, imaging, test, etc.).

were not noteworthy and, for purposes of this report, the results have been aggregated across all payers.

Out-of-Network Share of Services

The next two figures present the OON share of services by eight service categories aggregated across all payers, as well as the OON share of emergency room services for the four major payers. Site of care for hospital-based services included hospital inpatient, outpatient, and emergency room; non-hospital based services included those delivered in a non-hospital setting.

Figure 3.1: Out-of-Network Share of Services by Type of Service and Site of Care across All Payers,* 2010

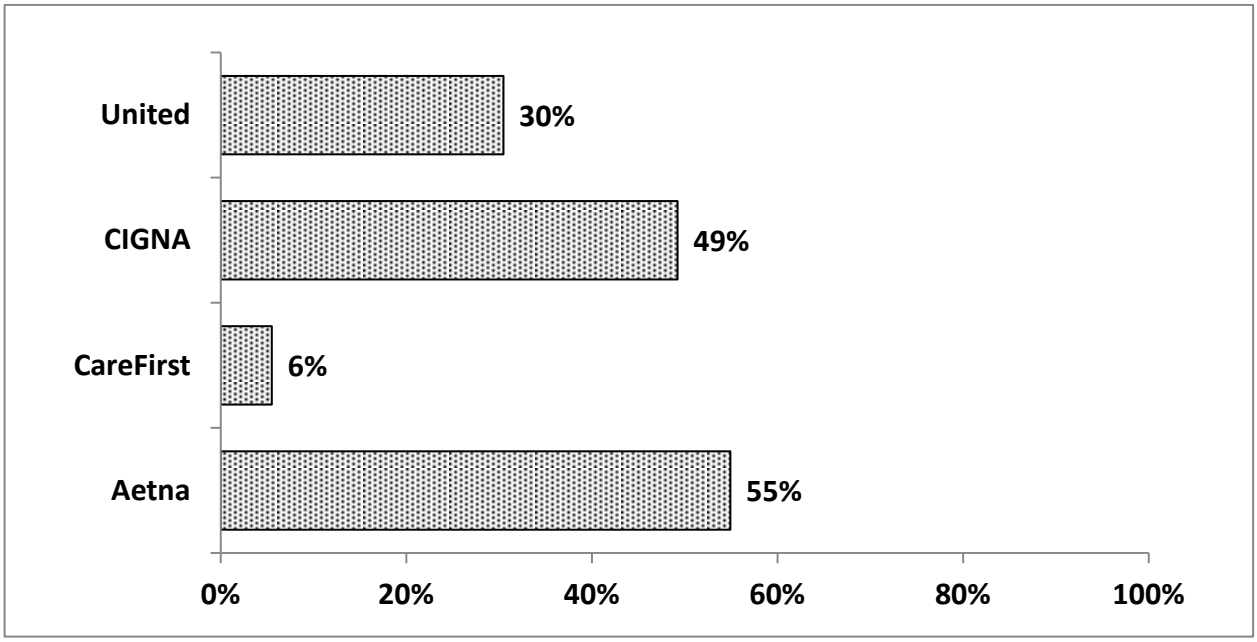


***NOTE**: Site of care for hospital-based services included hospital inpatient, outpatient, and emergency room; non-hospital based services included those delivered in a non-hospital setting.

Among non-hospital based services, the highest share of services paid for out of network was for Anesthesia (11%). All the other service categories had shares of less than 5% paid out of network. Among hospital-based services, the highest share of services paid for out of network was for emergency room (ER) services (25%). In general, the OON share of services did not differ much between hospital and non-hospital locations, except for pathology services (9% versus 4%).

Figure 3.1.a shows the OON share of ER services for each of the four major payers. Consistent with what one would expect, based on the breadth of its physician network, CareFirst has the lowest out-of-network share for ER services (6%) while Aetna and CIGNA have the highest shares, at 55% and 49%, respectively.

Figure 3.1.a: Out-of-Network Share of Emergency Room Services by Payer, 2010



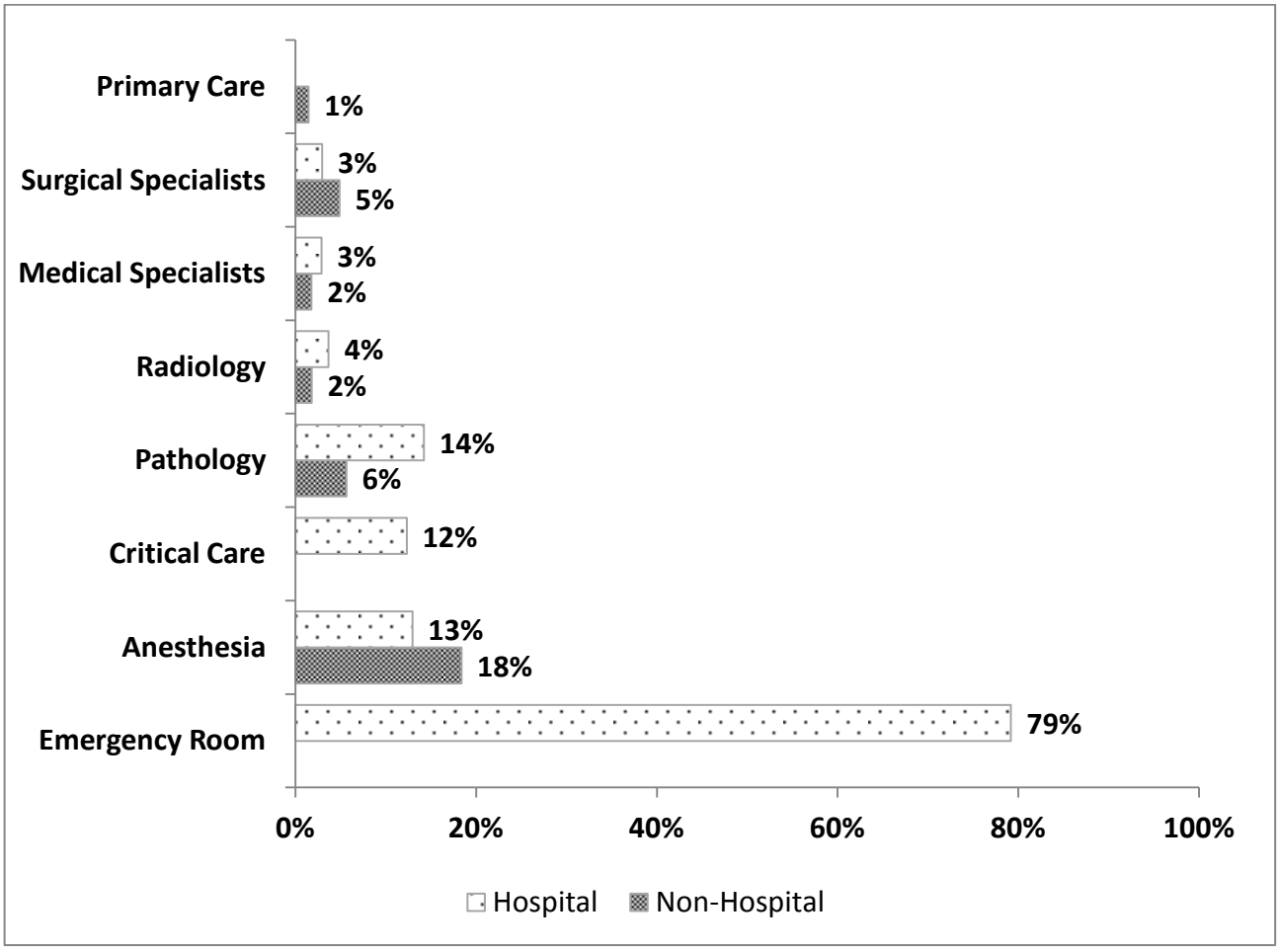
Out-of-Network Reimbursement

The next two figures show the aggregate ratios of OON payer reimbursement to total payer reimbursement, and payer total reimbursement to billed charges across all payers, by service category and site of care. Site of care for hospital-based services included hospital inpatient, outpatient, and emergency room, and non-hospital based services included those services delivered in a non-hospital setting.

Figure 3.2 shows the aggregate ratio of OON payer reimbursement to total payer reimbursement by BETOS category and site of care, aggregated across all payers. Similar to the proportion of OON services, the highest ratio of OON reimbursements to total reimbursement among non-hospital based services was for Anesthesia (18%), with all other categories at less than 10%. Among hospital-based services, emergency room services had the highest aggregate ratio of OON reimbursement to total reimbursement (79%), followed by Pathology (14%). Other categories ranged from 3% to 13%.

The biggest difference between OON reimbursement in hospital and non-hospital locations is seen for pathology, where OON reimbursement for hospital-based services is over twice that for non-hospital based services (14% versus 6%).

Figure 3.2: Aggregate Ratio of Out-of-Network Reimbursement to Total Reimbursement Across All Payers,* 2010



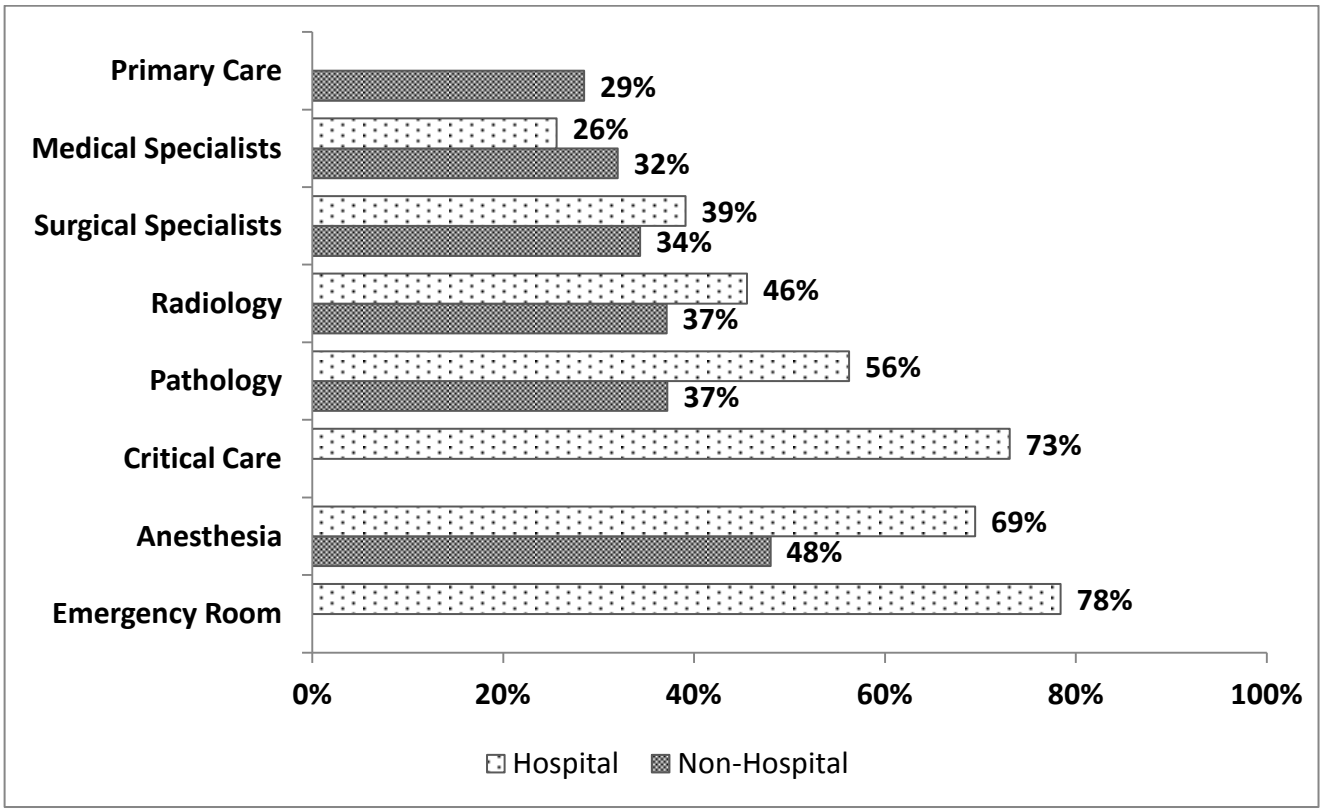
***NOTE:** Site of care for hospital-based services included hospital inpatient, outpatient, and emergency room; non-hospital based services included those delivered in a non-hospital setting.

Figure 3.3 shows the aggregate ratio of payer reimbursement to billed charges for OON services by BETOS category and site of care, aggregated across all payers. We present here the results by BETOS category and site of care, aggregated across all payers.

Aggregate ratios of reimbursement to billed charges for OON services for non-hospital based services ranged from 29% (primary care) to 48% (anesthesia). For hospital-based services, the ratios were higher, ranging from 26% (medical specialists) to 78% (emergency room).

Consistent with the results in Figure 3.2, the largest differences among hospital and non-hospital locations were observed for pathology (56% versus 37%) and anesthesia services (69% versus 48%).

Figure 3.3: Aggregate Ratio of Reimbursement to Billed Charges for Out-of-Network Services Across All Payers,* 2010



***NOTE:** Site of care for hospital-based services included hospital inpatient, outpatient, and emergency room; non-hospital based services included those delivered in a non-hospital setting.

Summary and Conclusions

This report examines the baseline impact of the AOB legislation on the three different stakeholders that are affected by the law. At baseline, results indicate that participation in private insurance is over 80% for almost all specialties, with the exception of psychiatrists. In terms of reimbursement for out-of-network (OON) services, currently hospital-based specialties are reimbursed at the highest rate compared to on-call surgical or medical specialists, and primary care. With respect to the user population, almost one of every five patients used some OON services, and user out-of-pocket spending for copayments and deductibles, as well as balance billing, increased in direct proportion to the proportion of spending on professional services allocated to OON services. For the payers, in general, the share of OON services did not differ much between hospital and non-hospital locations, nor did the ratio of payer reimbursement for OON services to total payer reimbursement; however, there were differences between hospital and non-hospital locations in the ratio of reimbursement to billed charges.

This legislation rebalances the relationship between a physician and a carrier when the physician opts not to participate in a carrier's network. The AOB legislation, passed shortly after federal health care reform was enacted, took a different path regarding payment reform. The delivery system reforms that are integral to health care reform, such as accountable care organizations (ACOs) and advanced

primary care initiatives, are beginning to support doctors, nurses, and other health care providers, enabling them to provide better care. ACOs, for example, reward providers for improving patients' health and lowering costs through improved care coordination.

The launch of the new initiatives in federal health reform sparked broad interest in collaboration on delivery system reforms among carriers and providers, which has spread beyond Medicare and Medicaid. The new delivery systems incorporate payment arrangements that require close alignment between carriers and health professionals to meet cost and quality goals. These arrangements generally require participation in a carrier's network as a first step. It is too early to say if the new delivery models and the underlying payment reforms will produce the desired results. Today, physicians have a wider range of options for participating with carriers in delivery and payment reform initiatives even as they gain greater flexibility in billing for services through the AOB legislation. MHCC will continue to monitor delivery system changes triggered by federal health care reform as we evaluate the impact of the AOB legislation.